

Date: Wednesday, 3/8/2006 10:37:43 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: ANGLE BRACKET
Job Number	: 26105		
Estimate Number	: 12248		
P.O. Number	: N/A	Part Number	: D34811
This Issue	: 3/8/2006 S.O. No. : N/A	Drawing Number	: D3481REV A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Drawing Revision	: A
Previous Run	: N/A	Material	: N/A
Written By	: <u>See comment below</u>	Due Date	: 3/31/2006
Checked & Approved By	: <u>06-03-08</u>	Qty:	10
Comment	: Est Rev:A New Issue 06-02-07 JLM	Um:	26
			Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: Issue P/O: 00000 768 06-03-09
 E-mail or Ship DXF file to vendor
 Laser cut flat pattern as per Dwg D3481
 Possible supplier: Ind. Laser
 Material release note is required.

2.0	D34811F	Shut-off valve -flat pattern
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)
 FLANGE PLATE

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure material certification is attached

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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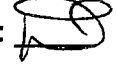


Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr if necessary.

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA:  Date: 06/03/13
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 3/8/2006 10:37:43 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ANGLE BRACKET

Job Number: 26105

Part Number: D34811

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form as per Dwg D3481

06.03.29 10

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06.03.29 10

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

06.03.29 10

Job Completion



06.03.30

Inspection Level 21

06/03/31 10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

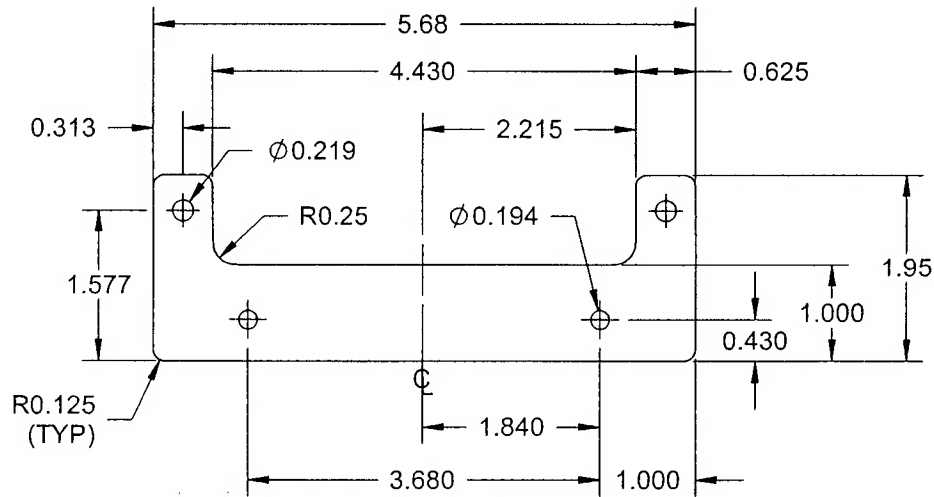
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

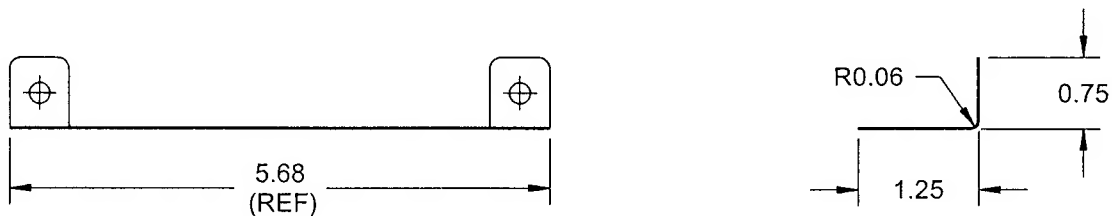
NOTE: Date & initial all entries

PRELIMINARY ISSUE

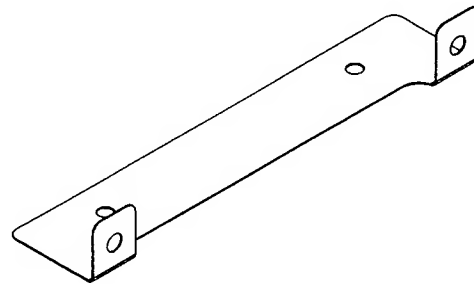
DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3481	REV. A SHEET 3 OF 4
DATE 06.01.20		TITLE SHUT-OFF VALVE BRACKET	SCALE 1:2



D3481-1F FLAT PATTERN



D3481-1 ANGLE BRACKET



NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
26 GAUGE SS (0.018 THICK)
(REF. DART SPEC. M304S26GA)
- 2) FINISH: ELECTRO CHEMICALLY POLISH
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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3/17/06

604-946-453 ATTN: PETE

03/17/2006 14:36 FAX 604 946 4153
03/17/2006 14:16 FAX 604 2729137INDUSTRIAL LASER CUTTING
INTEGRIS METALS002
001/004

3/17/2006 1:57 PAGE 001/002 Fax Server


Ryerson

T-726 P.007/015 F-507

253-288-9888

FROM-INTEGRIS

MAY-17-2006 10:05

		AK Steel Corporation Metallurgical Test Report Cashcoetion Works Cashcoetion, OH 43812		Page 1											
				Lead No. 7410672 SRN No. 7410672											
INTEGRIS METALS PO BOX 340 MINNEAPOLIS, MN 55440	INTEGRIS METALS 306 B STREET ALBURN, WA 98001	MILITARY ORDER NO. 77100-0191 PROCESSOR ORDER NO. 427135-01 BUYER'S ORDER NO. 427135-01		PART NO. 74251497 ENGLISH UNITS - PRODUCT - METRIC UNITS 316L NOM 48.000 X COIL											
SKID ID	PIECE	HEAT	PARENT COIL ID	NET WEIGHT											
SK07131A3	1	7280151	0540919-01	3,451 LB. 4012 KG.											
SK07131A4	1	7280151	0540919-01	3,470 LB. 4413 KG.											
SK07131A5	1	7280151	0540919-01	3,521 LB. 4046 KG.											
SK07131A9	1	7280151	0540919-01	3,441 LB. 3892 KG.											
TOTAL SKIDS	TOTAL PIECES			TOTAL NET WEIGHT											
4	4			13,884 LB. 1507 KG.											
L-Label Analysis of Heat P-Product Analysis of Parent Coil CHEMICAL ANALYSIS															
ID	C	MN	P	S	SI	CR	NI	MO	N	CU	CO				
L 7280151	.049	1.39	.027	.001	.35	18.18	8.05	.35	.04	.30	.12				
SHIPPING DATE: 03/13/2005 REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.															
PRODUCT DESCRIPTION CR SHIT TYPE 304 STAINLESS #28 FINISH SLIT EDGE * AMS 3615 & ALL TECH REQS HAVE BEEN MET UNLESS NOTED TO OR NOTED OTHERWISE * A SYN A 240 -04 EX PARA 3.1.1 S LONG WILL BE DETERMINED BY ASTM E 9 * ASTM A 490 -01 EX PARA 19.1.1 S LONG WILL BE DETERMINED BY ASTM M E 8 EX PARA 26.1.1.3 COIL WILL BE TAGGED ON OUTSIDE ONLY * ASTM A 566 -03 * IN-001 Rev 0, * IN-011 0 * BUYER PART# 74251497 * ASME SA-240 SECTION II PART A (2001 ED. 2002 ADDENDA) EX PARA 3.1.1 S LONG WILL BE DETERMINED BY ASTM E 9 * EX-10204 3.1.1 S															
PARENT COIL ID	FOR (S)	OR (L, T, D)	COND	% LONG 2 INCH MEASURED	TENSILE STRENGTH (KSI)	YS. % OFFSET (KSI)	ROCKWELL HARDNESS TAIL	ROCKWELL HARDNESS FRONT							
0540919-02	T	T	ASTM	11.0	105.2	27.1	72	74							
*** CONTINUED ON NEXT PAGE ***															

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 1
Heat/Lot : 86K8
TIN : B42748

Sold To: INTEGRIS METALS, LTD.
7910 40TH STREET SE
CALGARY, AB T2C2Y3

Ship To: ***CUSTOMER PICKUP***
4375 14TH STREET NORTHEAST
CALGARY
ABT3E7A9

Vendor Information

Cust PO #: 406824

Cust PO DT: 11/03/05

Specifications

STAINLESS STEEL SHEET, COLD ROLLED, ANNEALED AND PICKLED.
ASTMA240/04a 480/04a, 666/03, ASMESA240/04-A05, 480/04-A05, SA666/04
Q08766D-A X 11G PRM, AMS5513H X MRK&FIN, MIL5059D, AMD3, X CRWN MEAS
CORROSION: ASTM A262/02aE; 180Bend-OK
Buyer Part: 4288441
304 2B .1305 IN 48 IN 96 IN
Country of Origin: UNITED STATES

Mechanical Tests

		UOM	L	O		UOM	L	O
Yield Strength - 0.2% Offset	40	KSI	F	TRANSV				
Tensile Strength (UTS)	93.3	KSI	F	TRANSV				
Rockwell B	85		F	TRANSV				
Pct Uniform Elong 2 In/50mm	57.01	PCT	F	TRANSV				
Rockwell A	85		T	TRANSV				

Chemical Composition

C Carbon-Fct	.059	CR Chromium-Pct	18.360
CU Copper-Fct	.342	MN Manganese-Pct	1.643
MO Molybdenum-Pct	.285	N Nitrogen-Pct	.037
NI Nickel-Fct	8.150	P Phosphorus-Pct	.029
SI Silicon-Fct	.289		

Comments

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 INDUSTRIAL ROAD NORTH

Page : 2
Heat/Lot : 86K8
TIN : B42748

Material free from mercury contamination. No weld repairs.
EN 10204 3.1 PED 97/23/EC Annex1, Para. 4.3 Q08763F Cond A
This document certifies the material has been tested in
accordance with applicable specifications described herein
and has met those requirements.

QA by ERIC HESS 02/01/2006

Miscellaneous Data

GUKLPH , ORNL K123
Control #: 50C60214
Part #: 74270441
.135 X .48 X .96

Date: 03/17/06

SOLD TO: INDS. LASER

TO 110880

S/P 90-374786 - 02

Edg 3/17/06

The Chemical Analysis and Mechanical Test
data was received via EDI from the above
mentioned vendor.

INTEGRIS METALS, LTD.